

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P292137

Luminaire Tested: **22GR-LD5-28-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292137  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-A-UNV-L83050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3055.0 lumens  
Efficiency: N/A  
Efficacy: 135.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

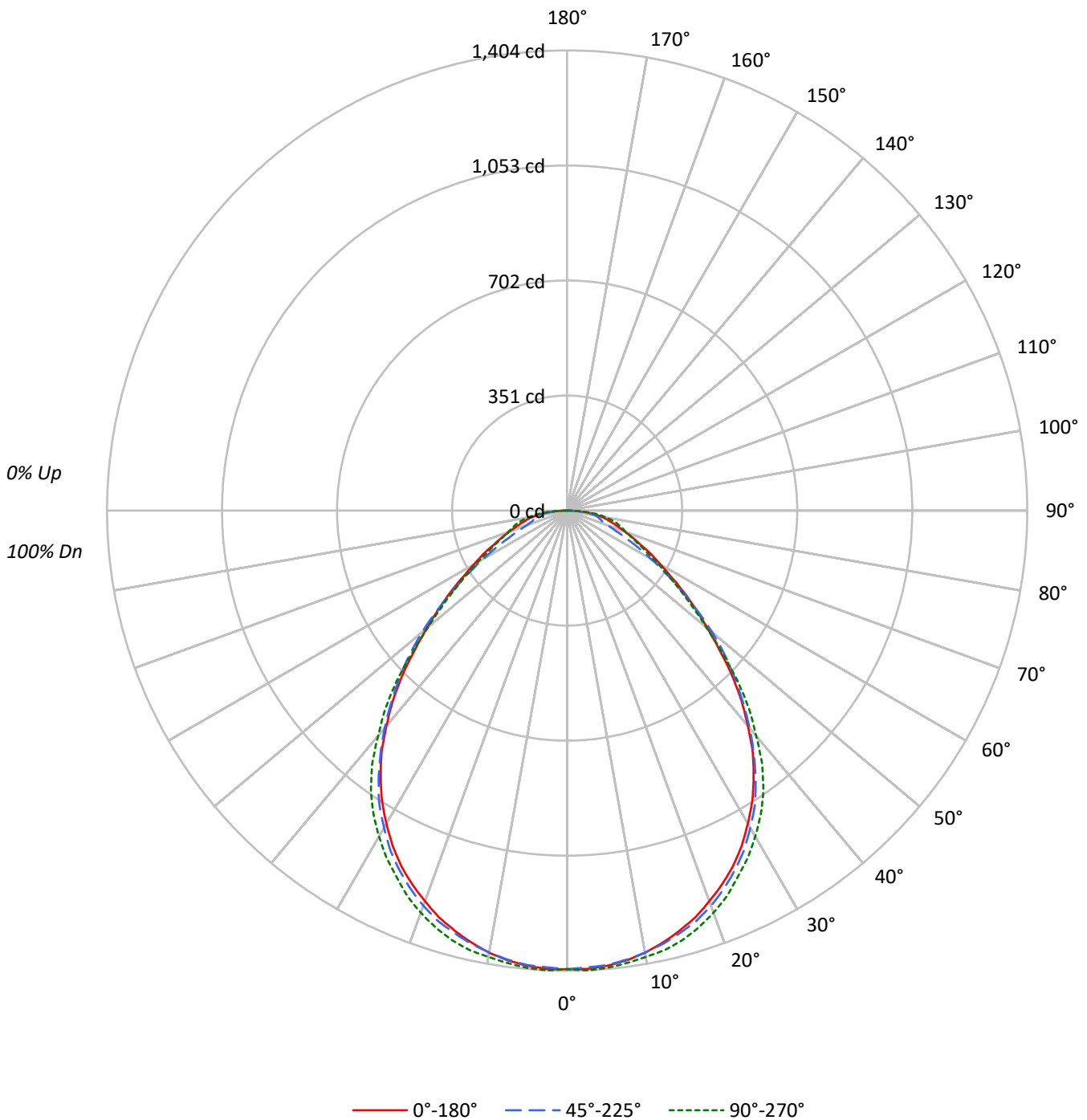
Input Watts (W): 22.506  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3765	3765	3765
5°	3766	3760	3783
10°	3743	3741	3778
15°	3696	3716	3781
20°	3632	3675	3740
25°	3555	3595	3660
30°	3426	3473	3567
35°	3258	3295	3428
40°	3012	3044	3152
45°	2705	2754	2798
50°	2339	2423	2316
55°	2041	1988	1961
60°	1767	1591	1699
65°	1580	1249	1526
70°	1466	1035	1504
75°	1464	1094	1671
80°	1619	1378	1884
85°	1689	1491	2130



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.4	4.3
10°-20°	377.1	12.3
20°-30°	557.7	18.3
30°-40°	629.3	20.6
40°-50°	554.8	18.2
50°-60°	380.6	12.5
60°-70°	224.6	7.4
70°-80°	140.1	4.6
80°-90°	58.4	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1067.2	34.9
0°-40°	1696.5	55.5
0°-60°	2631.9	86.1
0°-90°	3055.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3055.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1399	1399	1399	1399	1399	
5°	1394	1391	1392	1397	1400	132
15°	1327	1328	1334	1350	1357	374
25°	1197	1201	1211	1226	1233	550
35°	992	1000	1003	1027	1044	618
45°	711	714	724	728	735	546
55°	435	424	424	410	418	390
65°	248	218	196	227	240	250
75°	141	126	105	147	161	151
85°	55	51	48	63	69	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1399.1	1399.1	1399.1	1399.1	1399.1
2.5°	1399.8	1396.2	1394.8	1400.5	1404.1
5°	1394.1	1391.3	1392.0	1396.9	1400.5
7.5°	1384.2	1382.0	1382.0	1389.1	1392.7
10°	1369.9	1369.2	1369.2	1377.8	1382.7
12.5°	1350.0	1350.7	1353.6	1365.0	1373.5
15°	1326.6	1328.0	1333.7	1350.0	1357.1
17.5°	1301.0	1301.0	1312.3	1325.1	1333.7
20°	1268.3	1270.4	1283.2	1297.4	1305.9
22.5°	1234.9	1238.4	1249.1	1265.4	1273.2
25°	1197.2	1201.4	1210.7	1226.3	1232.7
27.5°	1153.1	1158.8	1168.7	1180.1	1193.6
30°	1102.6	1111.2	1117.6	1133.2	1148.1
32.5°	1051.4	1059.3	1066.4	1082.7	1099.8
35°	991.7	1000.3	1003.1	1027.3	1043.6
37.5°	930.6	934.1	935.6	959.7	977.5
40°	857.4	864.5	866.6	885.8	897.2
42.5°	787.0	789.8	794.1	808.3	821.8
45°	710.9	714.5	723.7	728.0	735.1
47.5°	631.3	642.0	652.6	639.1	639.8
50°	558.8	567.3	578.7	553.1	553.1
52.5°	494.1	498.4	499.1	477.7	482.0
55°	435.1	424.4	423.7	409.5	418.0
57.5°	376.1	361.9	356.9	352.6	362.6
60°	328.4	302.8	295.7	302.1	315.6
62.5°	289.3	256.6	243.1	259.5	271.6
65°	248.1	218.3	196.2	226.8	239.6
67.5°	216.1	187.7	159.2	202.6	211.9
70°	186.3	164.2	131.5	184.1	191.2
72.5°	162.1	145.0	113.7	166.4	174.9
75°	140.8	126.5	105.2	147.2	160.7
77.5°	123.7	108.1	98.1	127.3	143.6
80°	104.5	88.9	88.9	106.6	121.6
82.5°	82.5	69.7	71.8	86.7	97.4
85°	54.7	51.2	48.3	63.3	69.0
87.5°	27.7	28.4	25.6	32.7	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)